Excavation/Earthwork: Common mistakes / omissions in billing

1. The contractor's pay lines are not defined before start of excavation.
2. Initial levels & final levels are not taken on the same grid lines.
3. The initial & final levels are not taken with respect to same TBM.
4. Whenever the excavation is not in the rectangular section, the average level formula cannot be applied.
5. Whenever the disposal is measured separately the rate for the same being normally on the sectional measurements, the quantities transported to different destinations need to be converted into the sectional measurements from the truck measurements. For eg, the rate of disposal within site is Rs 100/m^3 & the rate of disposal to the contractor's destination is Rs 200/m^3. The quantity of the earth/excavated material disposed separately is normally measured by number of trucks. Then the entire quantity apportioned to each destination should be first converted into sectional measurements & then treated as a payable quantity.
6. The payment of royalty whenever is the responsibility of contractor, the royalty challans for each truck load disposed off need to accompany the bill & the total quantity disposed reconciled with the sectional measurements by applying conversion factor.
7. For the disposal at the nearby location where the payment is on the basis of number of trips made by the hired equipment, it is observed that the time for the round trip including one loading & one unloading cycle is too less, implying that the number of trips are not correctly recorded or the trucks are not filled to capacity.
8. The measurement of the body of the each truck has to be verified to ascertain the quantity it carries & the same should not be generalised as a common quantity for all the trucks.
9. It is normal practice that the excavation rate includes backfilling & the surplus quantity only qualifies for disposal. It is necessary to check the correct description of item in the BOQ & see that all elements of work included in BOQ are accounted for the payment under that item.
10. The backfilling/filling embankments are normally paid on the compacted measurements. We have a practice that contactor other than civil has to do the backfilling & the main contractor has to compact it. Under such division of work improperly compacted filling benefits both the contactors. The filling is therefore rarely done in layers achieving desired compaction factor with no body taking the responsibility. The compaction factor therefore needs to be verified before the quantity is certified & the reduction in compaction factor than the specified value if at all acceptable, the quantity of filling material by the supplier & the compaction by the civil contractor should be proportionately reduced.
11. Excavation with disposal of earth and filling under two contracts at the same site cannot take place at the same time .
12. Location and purpose of excavation and filling works has to be accurately defined.